

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/600,246	06/20/2003	Paolo Guiseppe Fazzini	R&G 360	5552	
23474 75	23474 7590 03/07/2006			EXAMINER	
	L BOUTELL & TANIS	YENKE, BRIAN P			
2026 RAMBLING ROAD KALAMAZOO, MI 49008-1631			ART UNIT	PAPER NUMBER	
	,		2614		

DATE MAILED: 03/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/600,246	FAZZINI, PAOLO GUISEPPE				
Office Action Summary	Examiner	Art Unit				
	BRIAN P. YENKE	2614				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  (6(a). In no event, however, may a reply be tim  (ill apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONEL	l. ely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
	action is non-final.					
·	·					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-7</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-7</u> is/are rejected.						
7) Claim(s) is/are objected to.	')☐ Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>30 Jul 04/20 Jun 03</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:						
<ul> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> </ul>						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
	·					
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 120ct,02Feb04: 12Aug 05, 20 July 03	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	atent Application (PTO-152)				

Application/Control Number: 10/600,246

Art Unit: 2614

#### **DETAILED ACTION**

## Claim Objections

1. Claims 4 and 7 objected to because of the following informalities:

Claim 4 and 7, line 2 and 3 respectively, recite "centre", which should be "center".

Claim 7, line 3, says "app", which the examiner assumes is "opposed".

Appropriate correction is required.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2a. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Dougall et al., US 5,019,903.

In considering claims 1-7,

Dougall discloses Figures 1-6, that pixels in multiple rows both diagonally, and those vertical of the pixel to be interpolated (x in the drawings) is performed, by deriving a difference value (absolute value) between each of the points, where the determined lowest average difference value vector is the selected (col 4, line 41-67, col 7, line 54-62) gradient vector choses for interpolation. As shown in the figures the values of the pixel above and below the pixel to be inserted/interpolated is computed.

Application/Control Number: 10/600,246 Page 3

Art Unit: 2614

2b. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamashita et al., US 5,347,509.

In considering the above claims, Yamashita discloses a conventional interpolation scheme for converting interlaced to progressive (Figs 12, 13) where the differences between pixels (An-1-Cn+1, An-Cn, An+1-Cn-1) are derived and compares the level difference where the lowest value is selected, and the interpolated pixels is computed using the average of the pixel values in that direction (col 2, line 1-27). The averages of the values are the values of pixels which are above and below the pixel to be inserted/interpolated as shown in the drawing, where the steps are only performed for the pixel regions as shown.

2c. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hong, US 5,708,474

In considering the above, claims Hong discloses (Figs 10-11) that the pixels values above and below the interpolated/inserted pixel value are determined and the average of the smallest different is selected in considering the vertical, horizontal, and diagonal variations of the video signal on a 3D region (col 6, line 1-67).

## Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—see newly cited references on attached form PTO-892.

Application/Control Number: 10/600,246 Page 4

Art Unit: 2614

4. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure—see newly cited references on attached form PTO-892.

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Brian Yenke whose telephone number is (571)272-7359. The

examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

Supervisor, David L. Ometz, can be reached at (571)272-7593.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571)-273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose

telephone number is

(703)305-HELP.

General information about patents, trademarks, products and services offered by

the United States Patent and Trademark Office (USPTO), and other related information is

available by contacting the USPTO's General Information Services Division at:

800-PTO-9199 or 703-308-HELP

(FAX) 703-305-7786

(TDD) 703-305-7785

An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

For other technical patent information needs, the Patent Assistance Center can be reached through customer service representatives at the above numbers, Monday through Friday (except federal holidays) from 8:30 a.m. to 5:00 p.m. EST/EDT.

The Patent Electronic Business Center (EBC) allows USPTO customers to retrieve data, check the status of pending actions, and submit information and applications. The tools currently available in the Patent EBC are Patent Application Information

Retrieval (PAIR) and the Electronic Filing System (EFS).

PAIR (http://pair.uspto.gov) provides customers direct secure access to their own patent application status information, as well as to general patent information publicly available. EFS allows customers to electronically file patent application documents securely via the Internet. EFS is a system for submitting new utility patent applications and pre-grant publication submissions in electronic publication-ready form. EFS includes software to help customers prepare submissions in extensible Markup Language (XML) format and to assemble the various parts of the application as an electronic submission package. EFS also allows the submission of Computer Readable Format (CRF) sequence listings for pending biotechnology patent applications, which were filed in paper form.

Application/Control Number: 10/600,246

Art Unit: 2614

03 March 2006

BRIAN P. YENKE PRIMARY EXAMINER Page 6

9.♥